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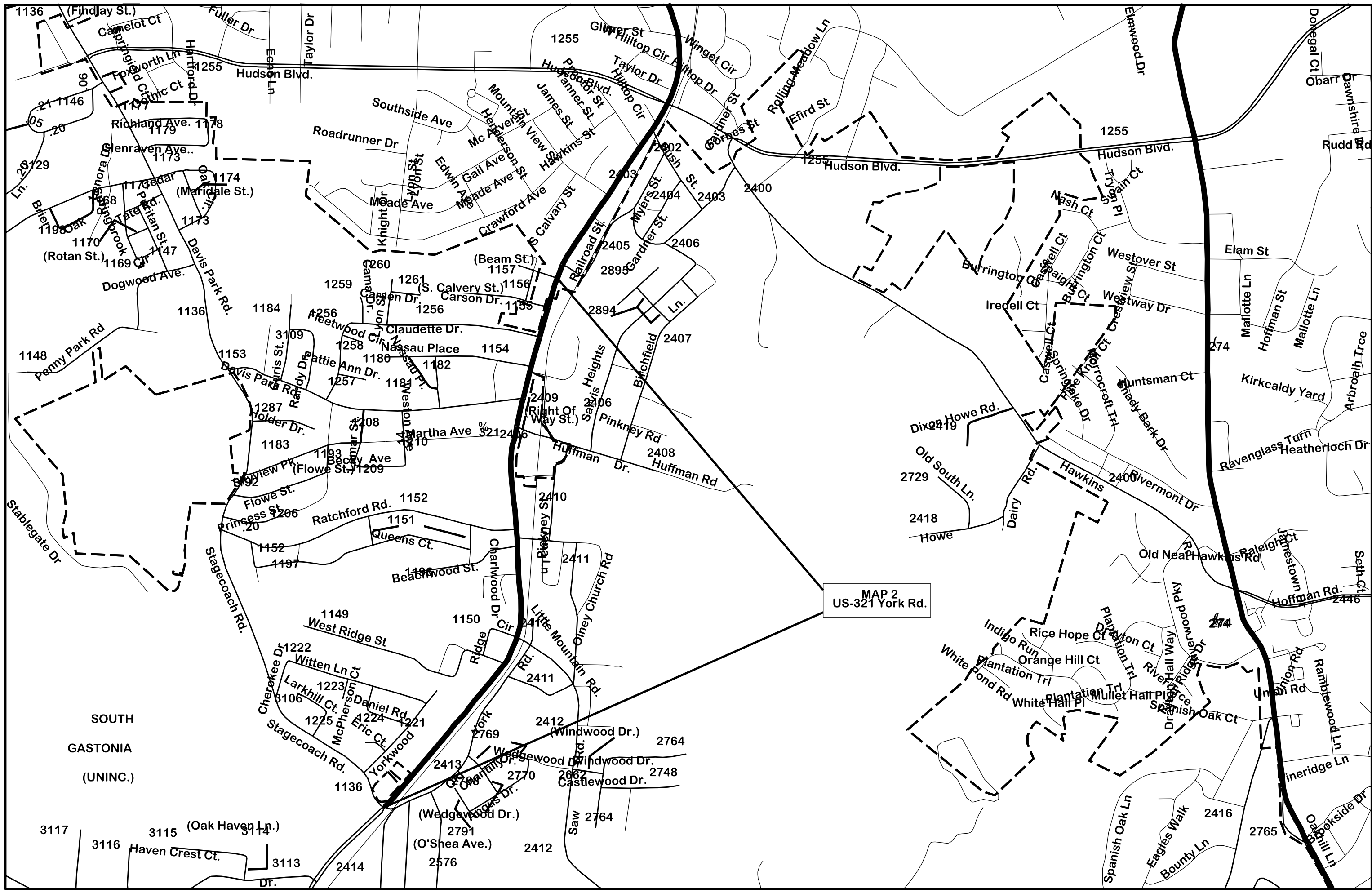
**This file or an individual page  
shall not be considered a certified document.**



**GASTON COUNTY**  
**2024CPT.12.07.10361**



# GASTON COUNTY 2024CPT.12.07.10361

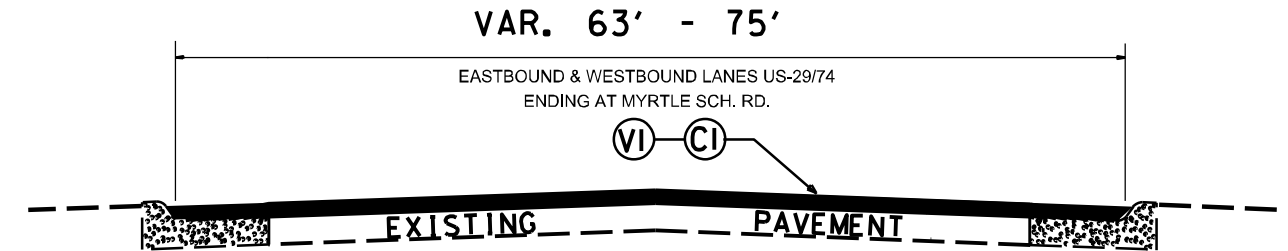


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
GASTON COUNTY 2024-2025	4	16
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2024CPT. 12. 07. 10361		
2024CPT. 12. 07. 20361		

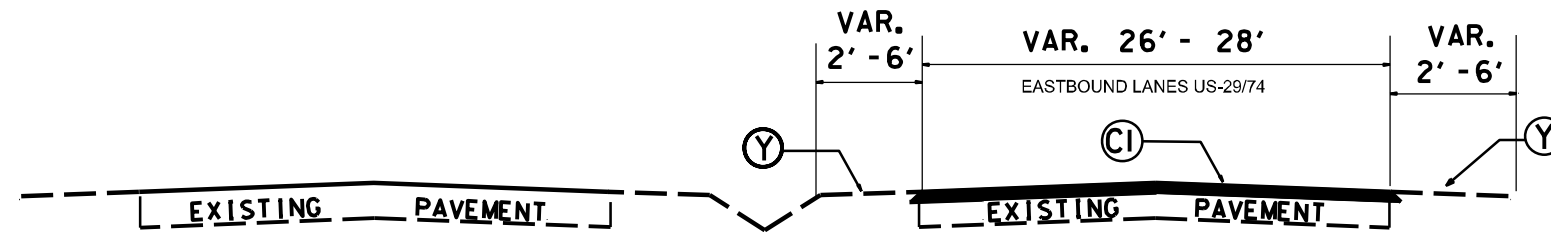
NOTES:

- PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
- MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
- MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
- MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



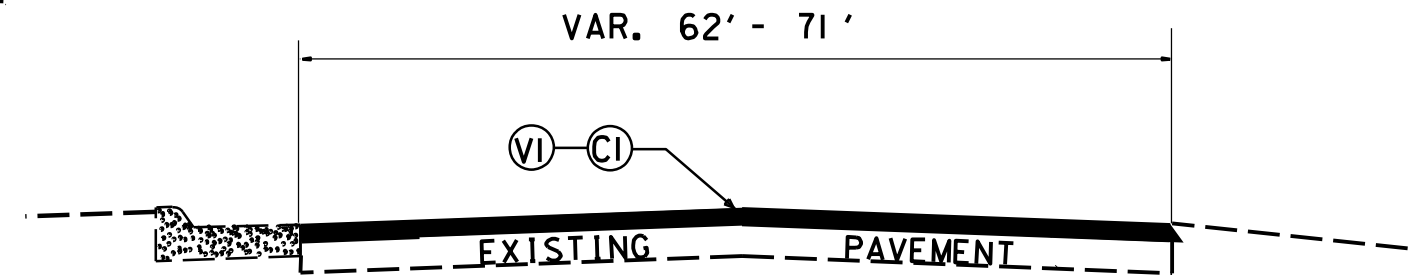
**TYPICAL SECTION NO. 4**

(MAP 1 - STA. 212+50 to 216+00)



**TYPICAL SECTION NO. 1**

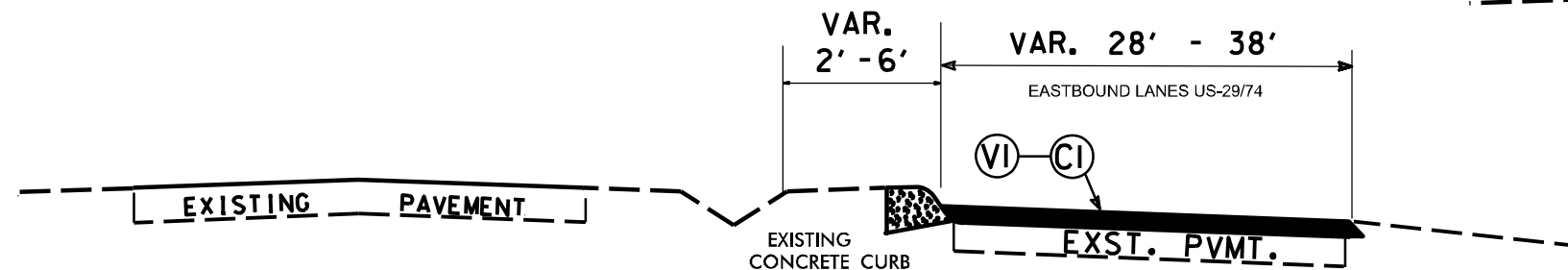
(MAP 1 - STA. 0+00 to 209+20)



**TYPICAL SECTION NO. 5**

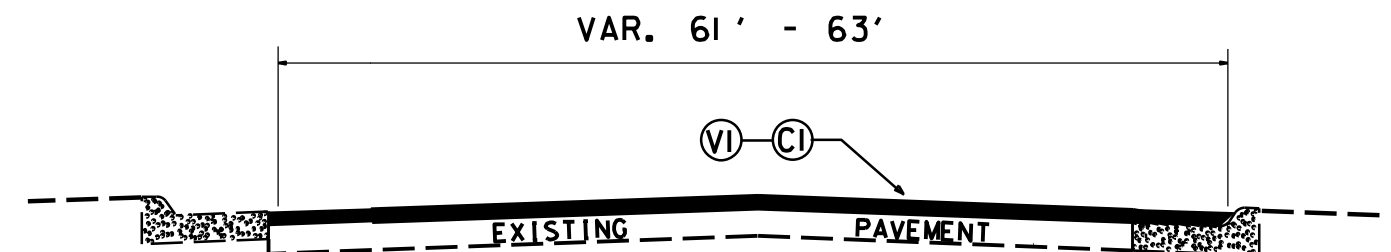
(MAP 2 - STA. 0+00 to 34+00)

\*\* Mill & Pave to edge of RR Crossing on Little Mtn. Rd.



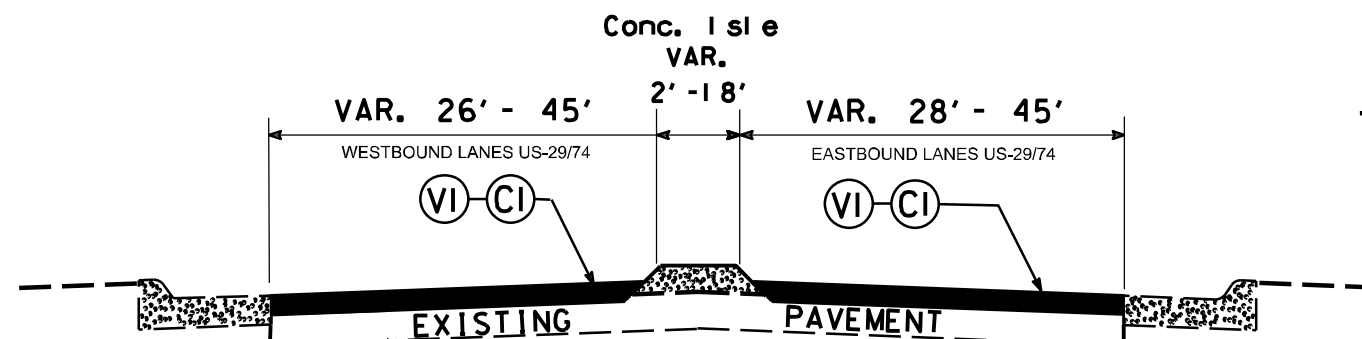
**TYPICAL SECTION NO. 2**

(MAP 1 - STA. 209+20 to 210+70)



**TYPICAL SECTION NO. 6**

(MAP 2 - STA. 34+00 to 80+25)



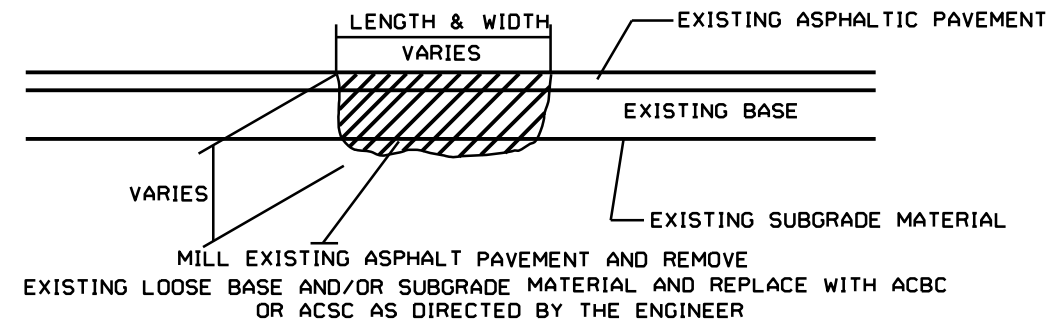
**TYPICAL SECTION NO. 3**

(MAP 1 - STA. 210+70 to 212+50)

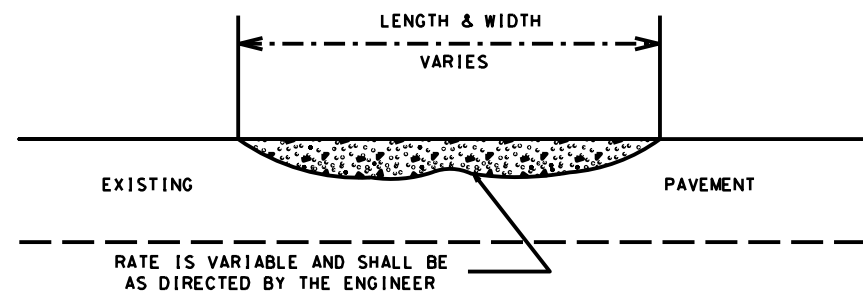
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

NOTES:

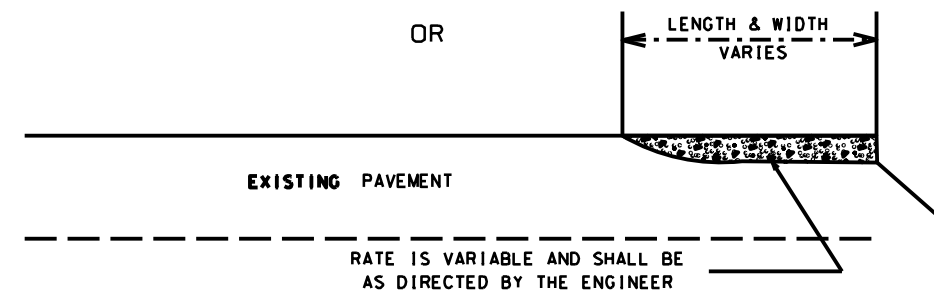
- PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
- MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
- MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
- MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



PATCHING EXISTING PAVEMENT

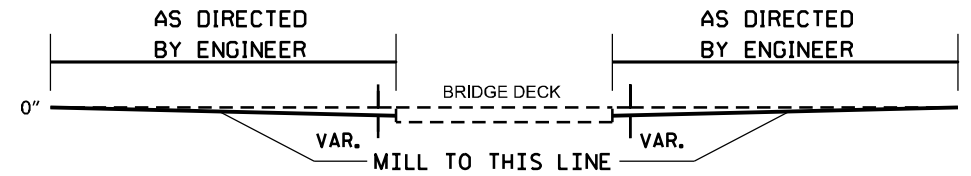


OR

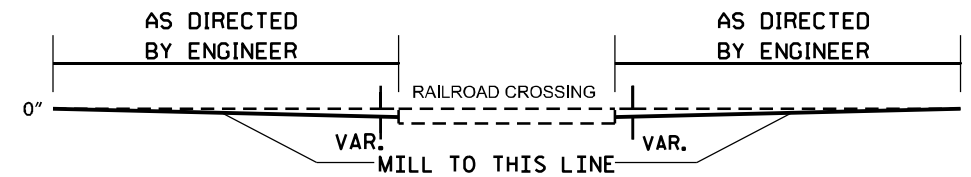


ASPHALT CONCRETE SURFACE COURSE  
TYPE S9.5C (LEVELING COURSE)

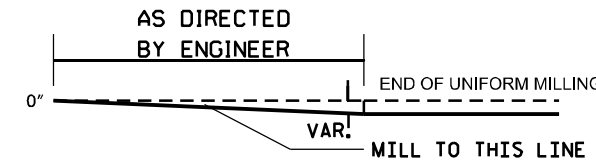
INCIDENTAL MILLING DETAILS



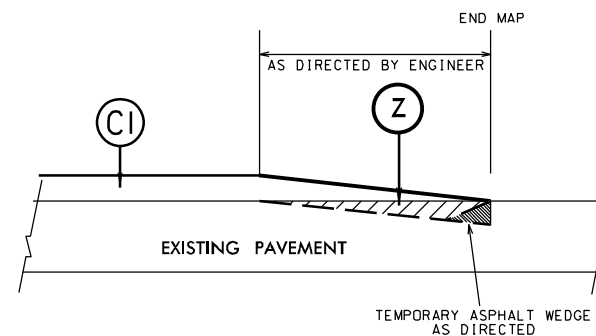
BRIDGE PROFILE



RAILROAD PROFILE

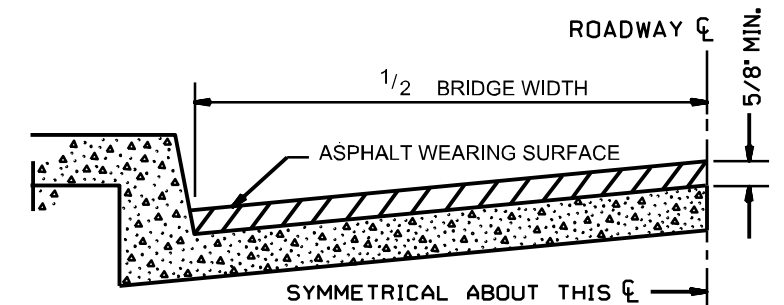


END OF MILLING PROFILE



TIE-IN MILLING DETAIL

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
GASTON COUNTY 2024-2025	5	16
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2024CPT. 12. 07. 10361		
2024CPT. 12. 07. 20361		



BRIDGE HALF TYPICAL SECTION

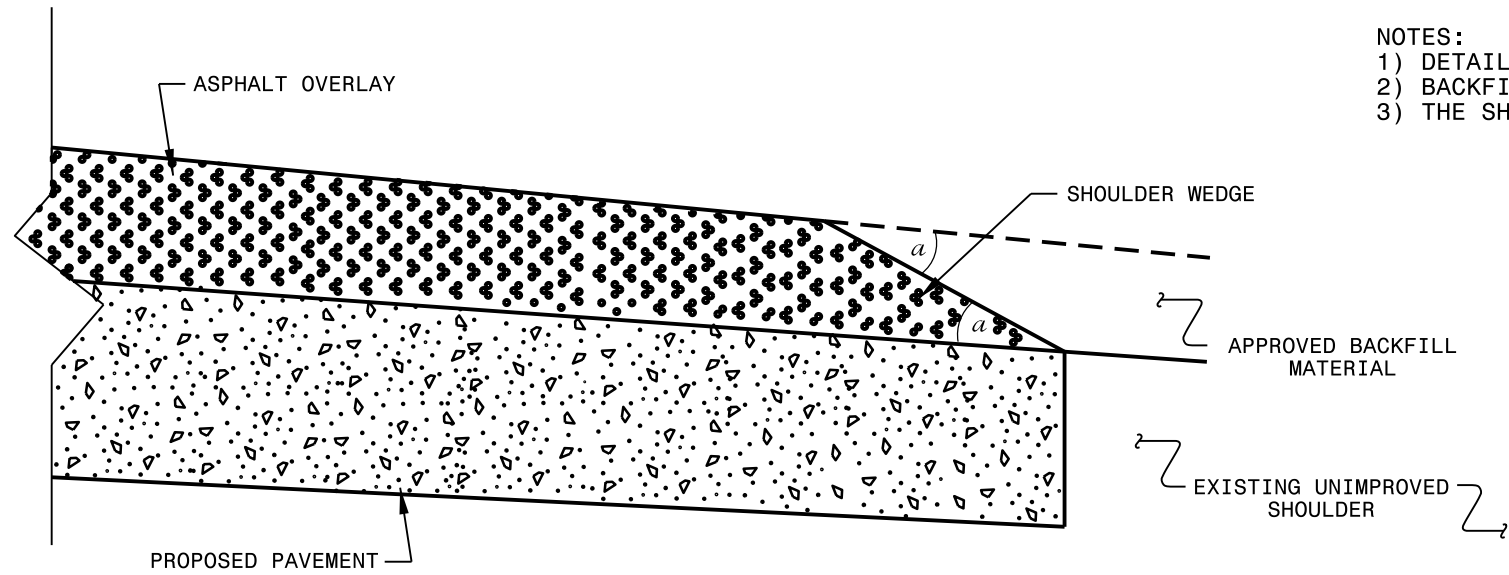
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

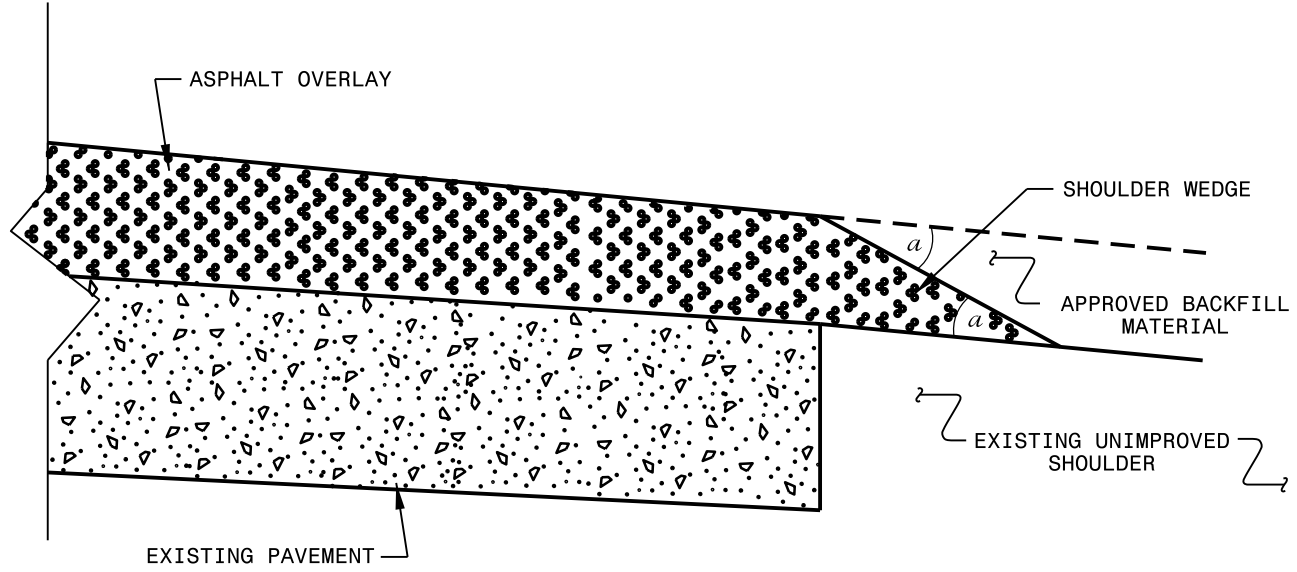
NOTES

ALL UNPAVED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.  
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.  
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.  
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.  
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

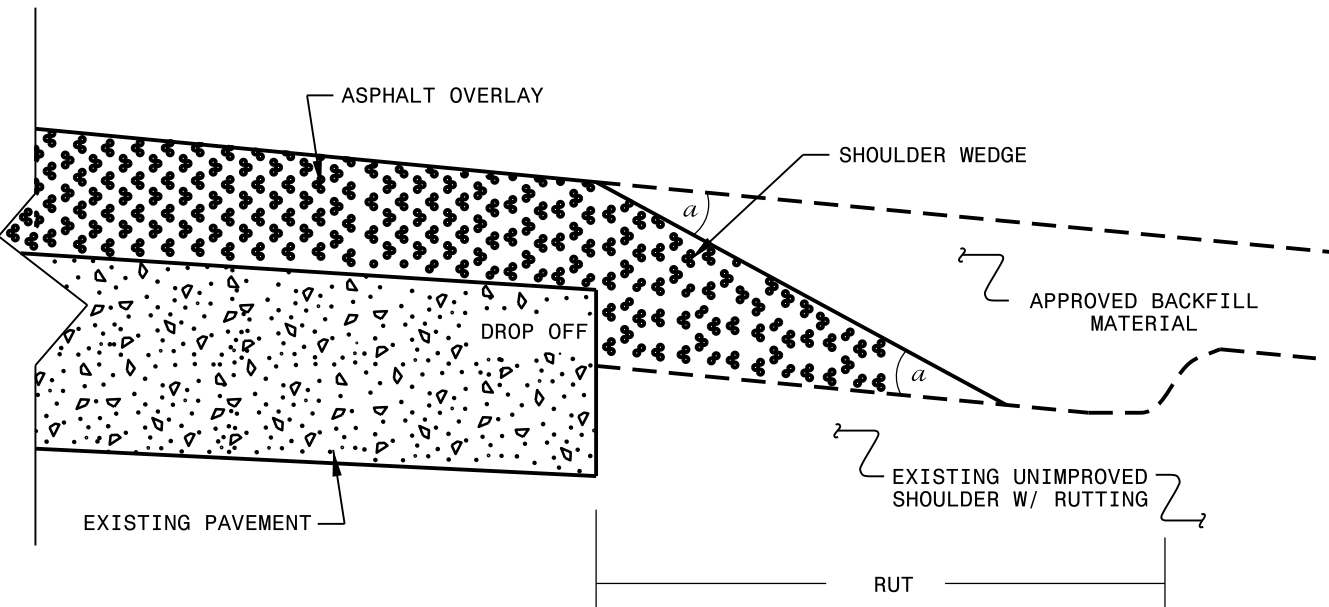
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ Widening or  
 with Existing Paved Shoulder having no dropoffs)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



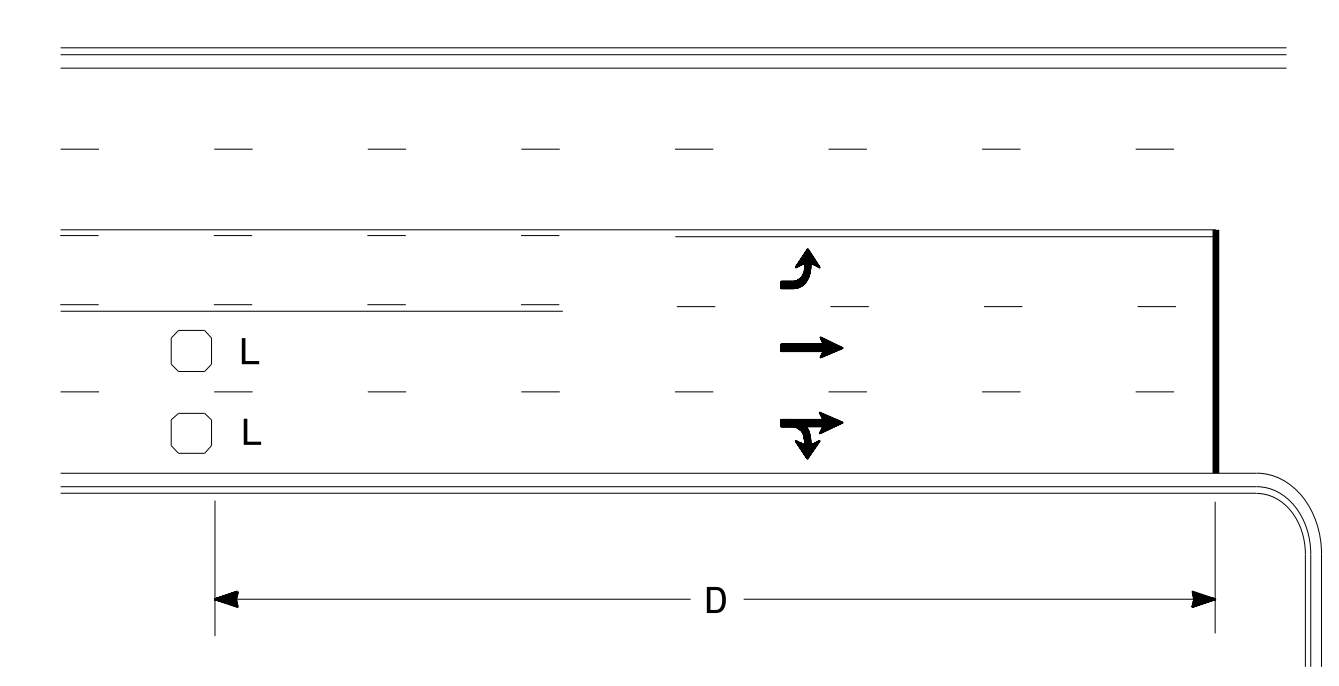
**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 10/16/12		
CHECKED BY:	DATE:		
FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN USER NAME

### High Speed Detection (≥40 mph)

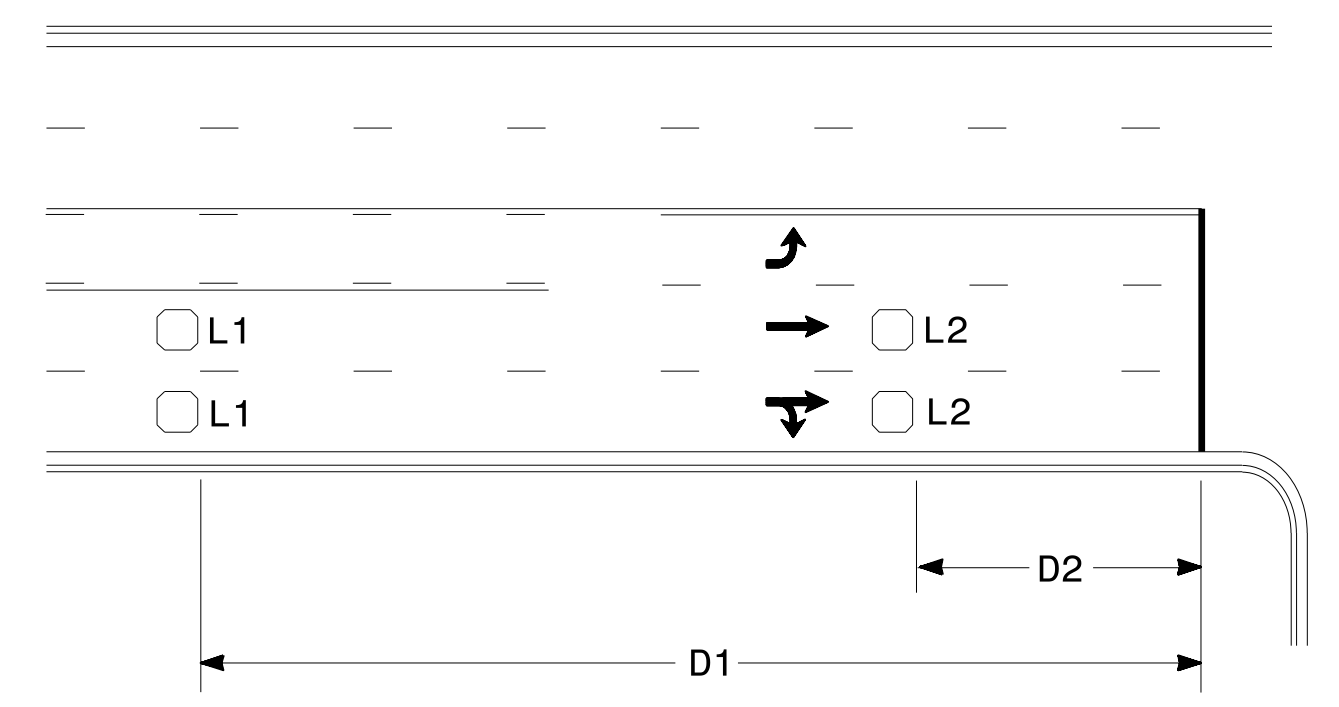


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft  
Wired in series for TS1  
Controllers  
Wired separately for TS2,  
170, and 2070L Controllers

Volume Density Operation

OR

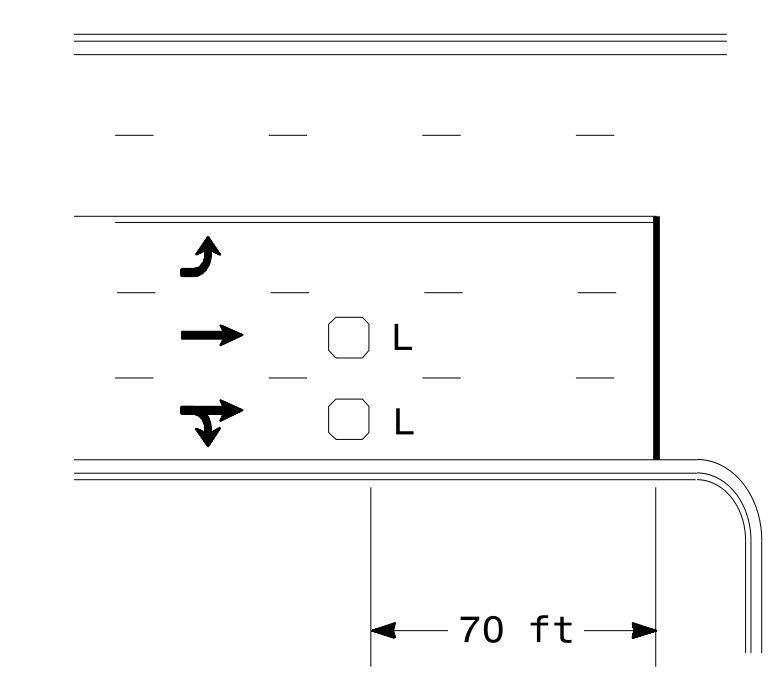


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft  
Wired in series  
L2 = 6ft X 6ft  
Wired in series

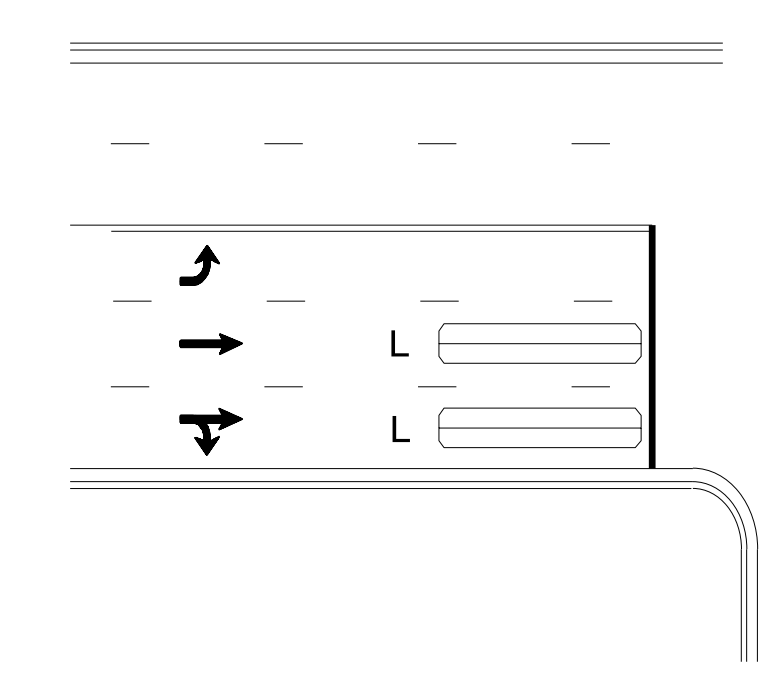
"Stretch" Operation

### Low Speed Detection (≤35 mph)



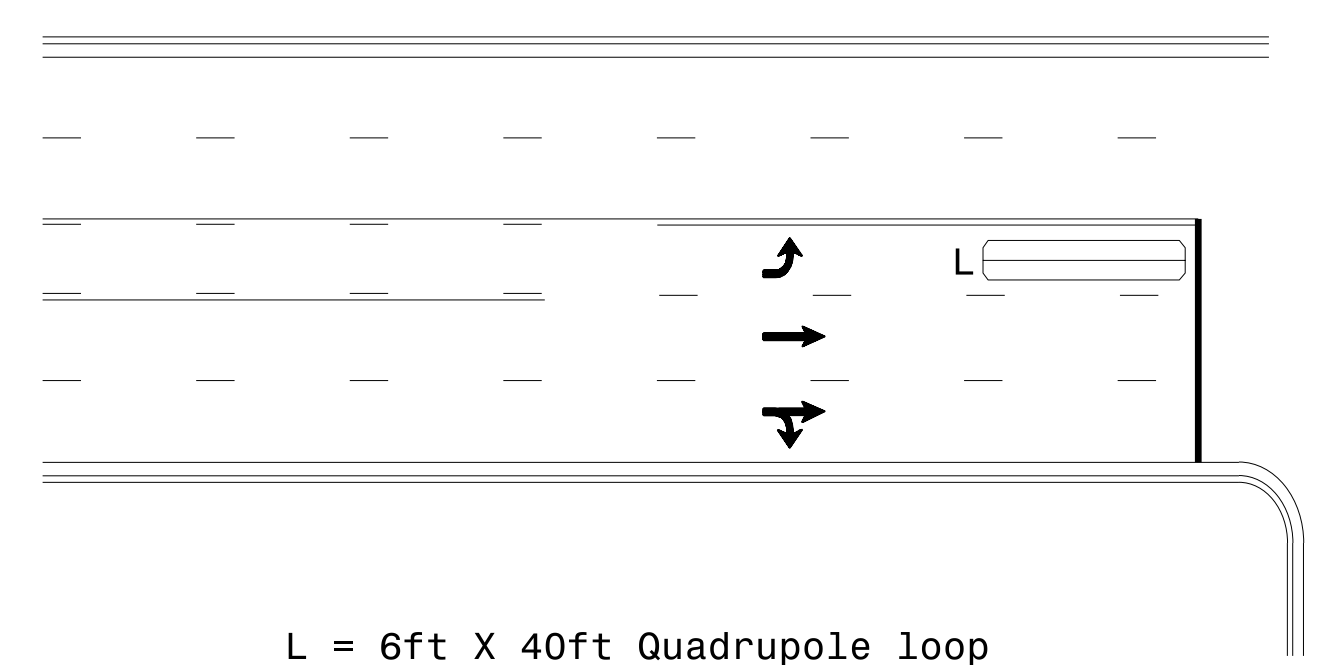
L = 6ft X 6ft  
Wired in series

OR



L = 6ft X 40ft  
Quadrupole loop, wired separately

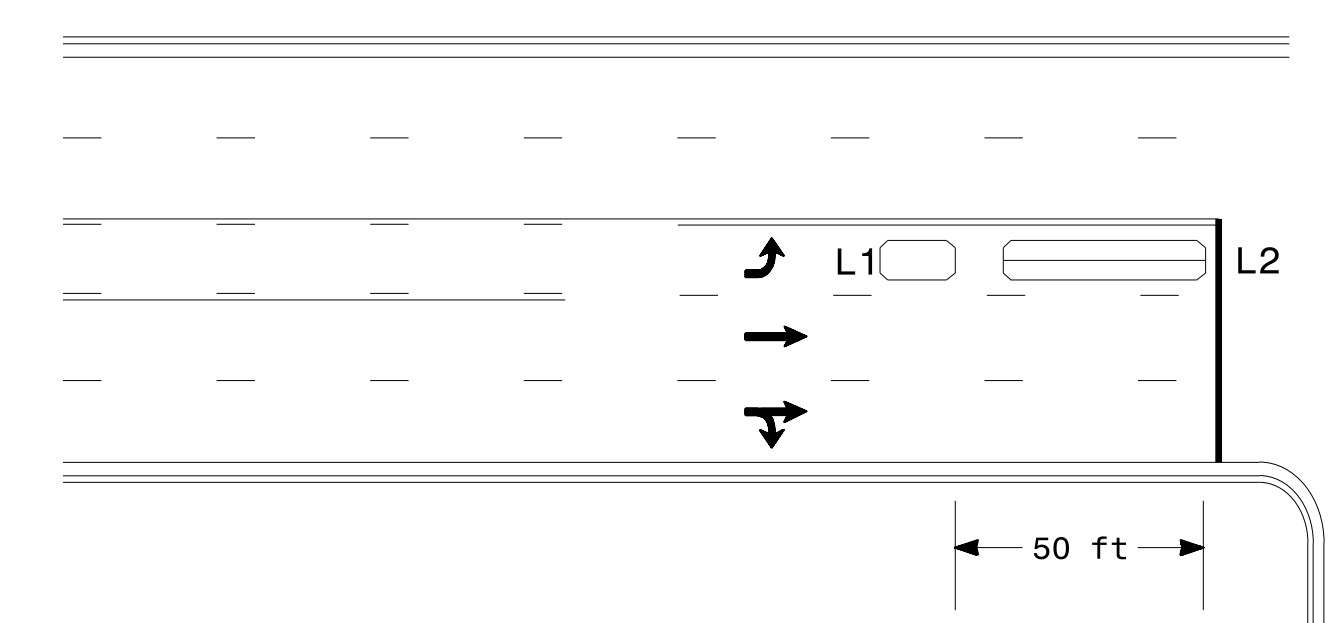
### Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

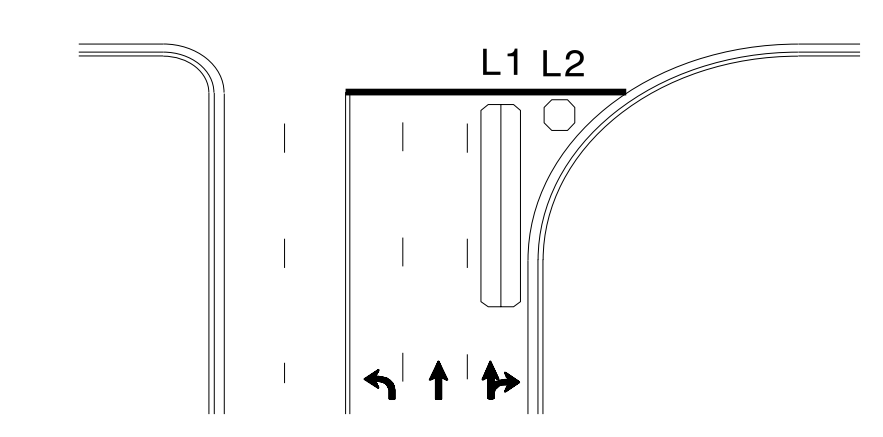
OR



L1 = 6ft X 15ft Queue detector  
L2 = 6ft X 40ft Quadrupole loop

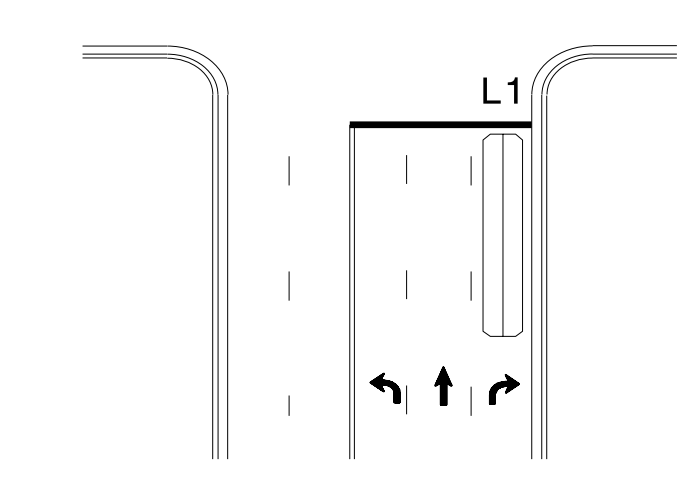
Queue Loop Detection

### Right Turn Lane Detection

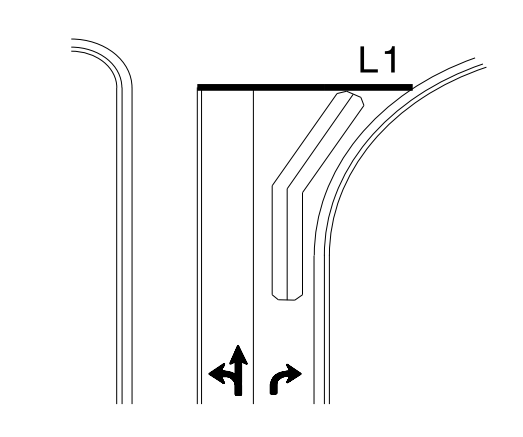


Shared Lane/  
Wide Radius Turn

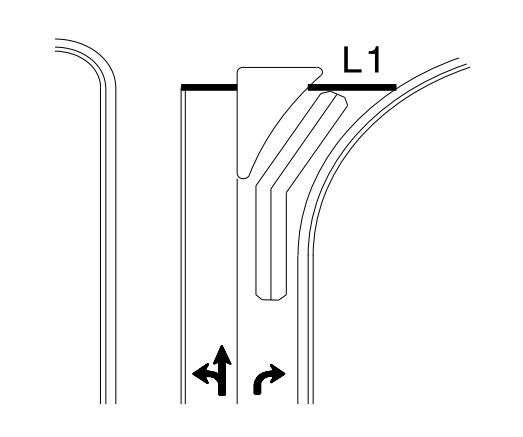
L1 = 6ft X 40ft Quadrupole loop  
L2 = 6ft X 6ft [Minimum] Presence loop  
Wired separately



Standard Turn

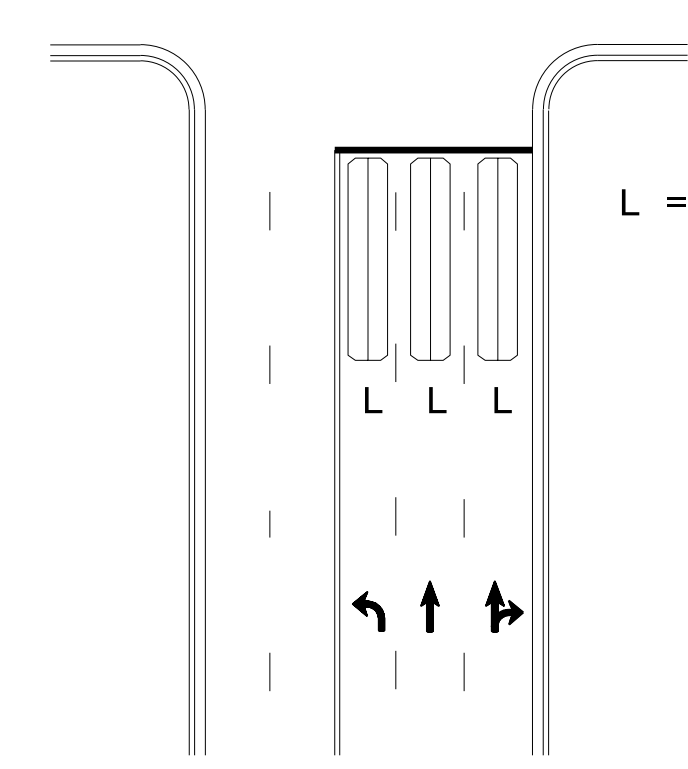


Wide Radius Turn



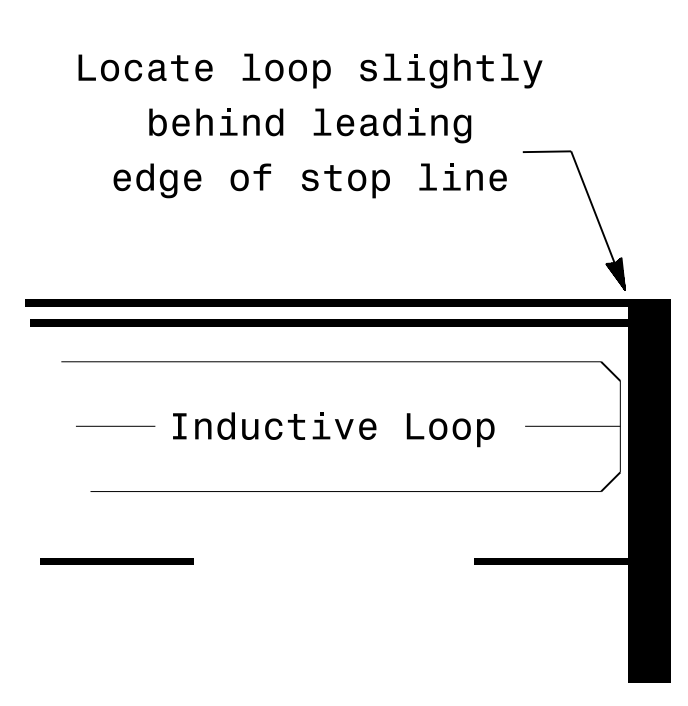
Channelized Turn

### Side Street Detection



L = 6ft X 40ft  
Quadrupole loop  
Wired to separate  
detectors/channels

### Presence Loop Placement at Stop Lines



Locate loop slightly  
behind leading  
edge of stop line

Note:  
Loop may be located in advance  
of stop line under any of the  
following conditions:  
1) stop line is greater than 15'  
from edge of intersecting  
roadway  
2) loop detects a permissive or  
protected/permissive left turn  
3) for an exclusive right turn  
lane

### Recommended Number of Turns

Single 6' X 6' loop  
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns  
6' X 15' Loops:  
Lead-in < 150', use 2 turns  
Lead-in > 150', use 3 turns

750 N. Greenfield Pkwy, Garner, NC 27529

#### Typical Signal Loop Locations

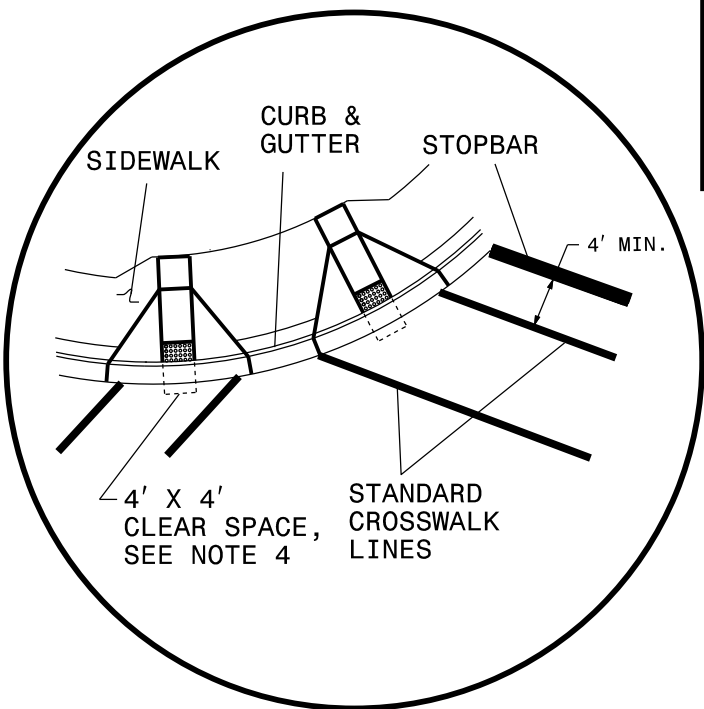
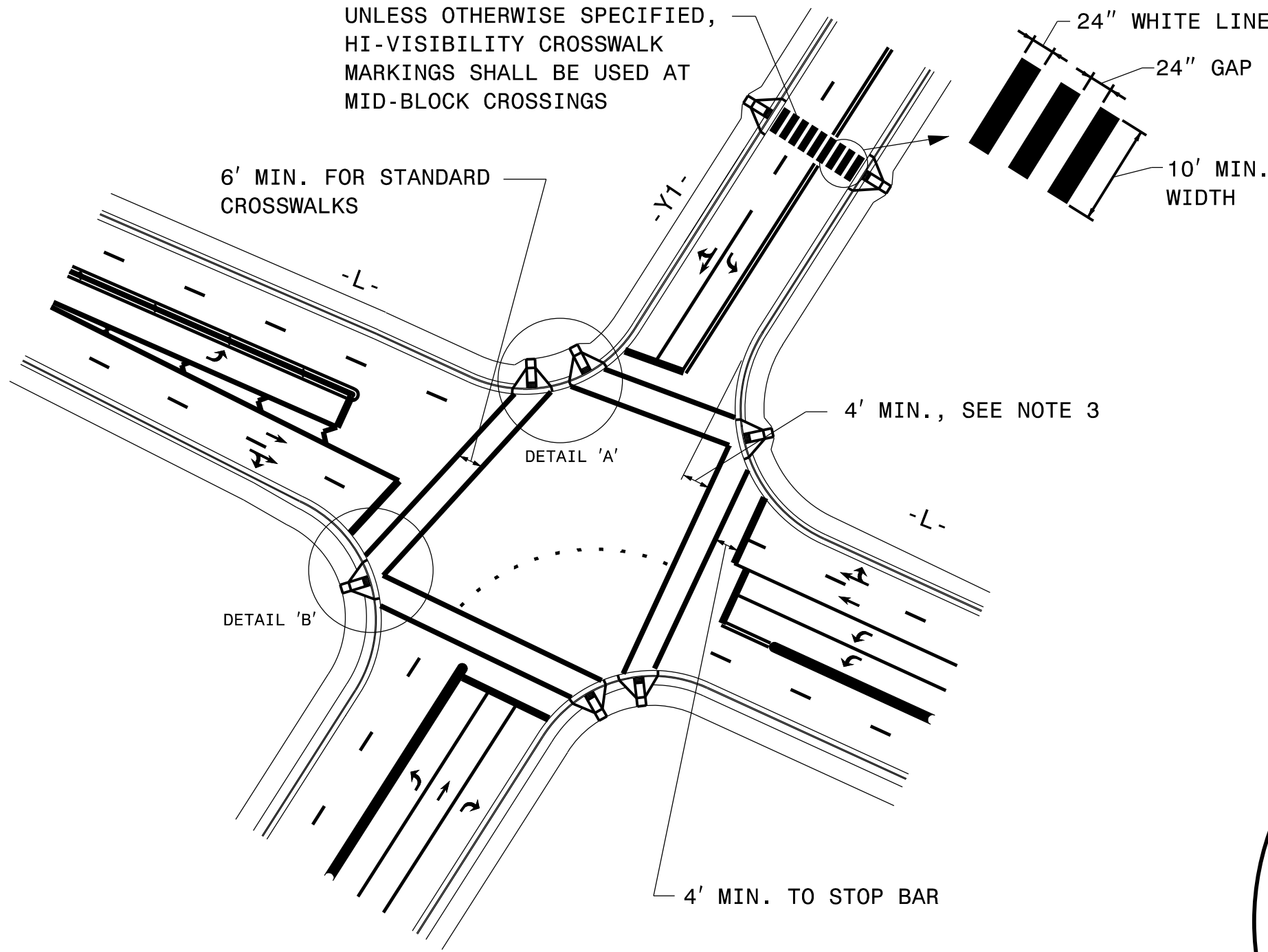
PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
REVISIONS	INIT. DATE

SCALE: N/A

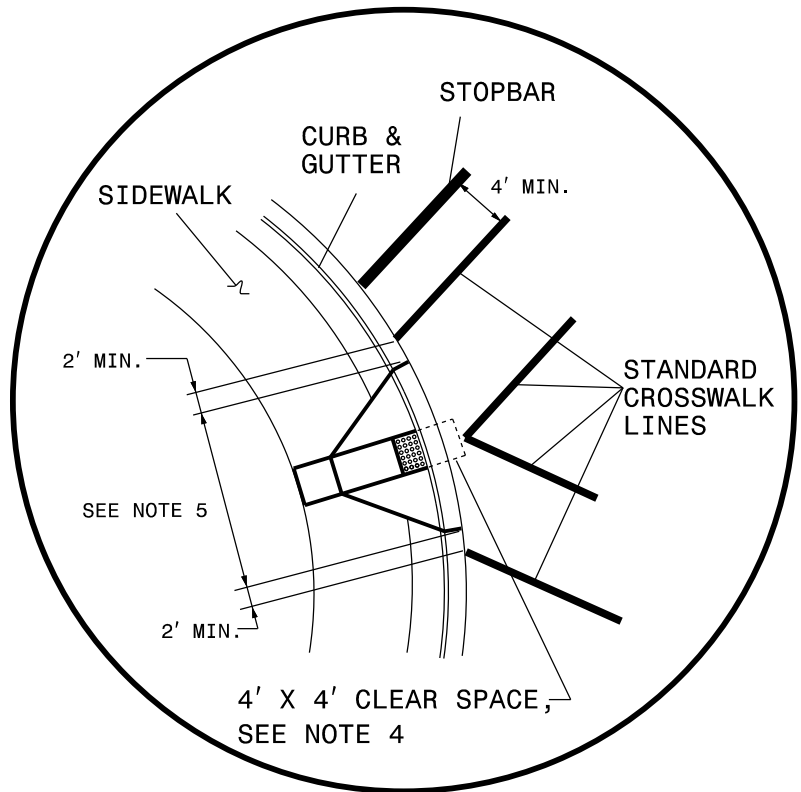
SEAL  
NORTH CAROLINA  
PROFESSIONAL ENGINEER  
PAMELA L. ALEXANDER  
23489

DocuSigned by:  
*P. Alexander*  
1/30/2015 10:44:44 AM  
B4756E00CE4E4ED  
SIG. INVENTORY NO.

3D:\1116-2015-12-29  
 S:\1116\1116-2015-12-29\Signal Design Section\Eastern Region\loop\loop\1015.dgn  
 paalexander



DETAIL 'A'- DUAL CURB RAMPS



DETAIL 'B'- SINGLE DIAGONAL CURB RAMP

**GUIDANCE DETAIL FOR CROSSWALK MARKINGS**

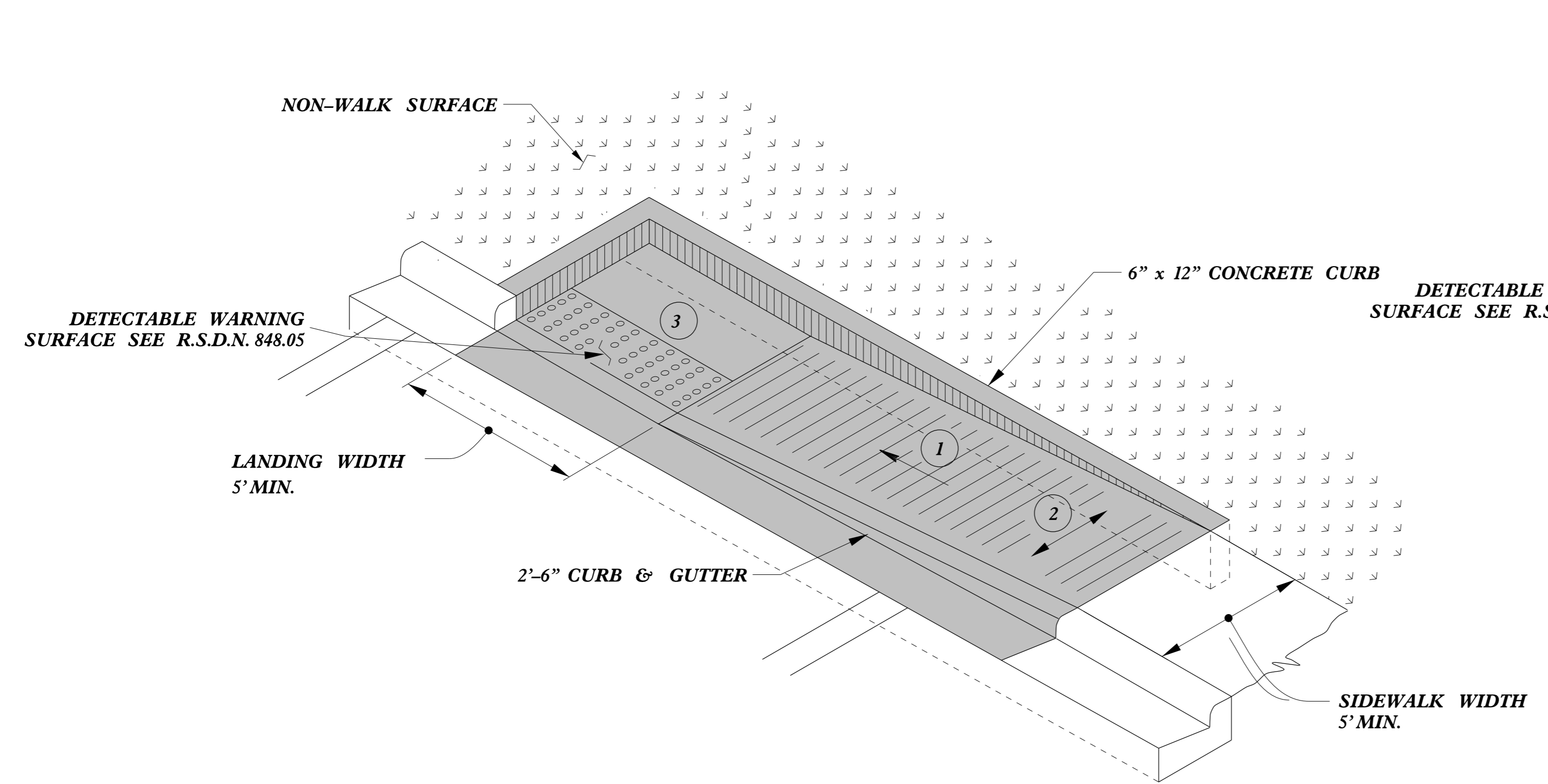
**NOTES:**

1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS NOT STATIONED ON THE DETAIL SHEETS OR WHEN FIELD ADJUSTMENTS REQUIRED MOVING STATIONED MARKINGS AS DIRECTED BY THE ENGINEER. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
2. THE CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. ONLY INSTALL CROSSWALK MARKINGS WHERE SHOWN ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALL AS SPECIFIED ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
3. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4' MIN.
4. BEYOND THE BOTTOM GRADE BRAKE, A CLEAR SPACE OF 4' X 4' MINIMUM SHALL BE PROVIDED WITHIN THE MARKINGS.
5. SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2 FEET LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
6. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS.

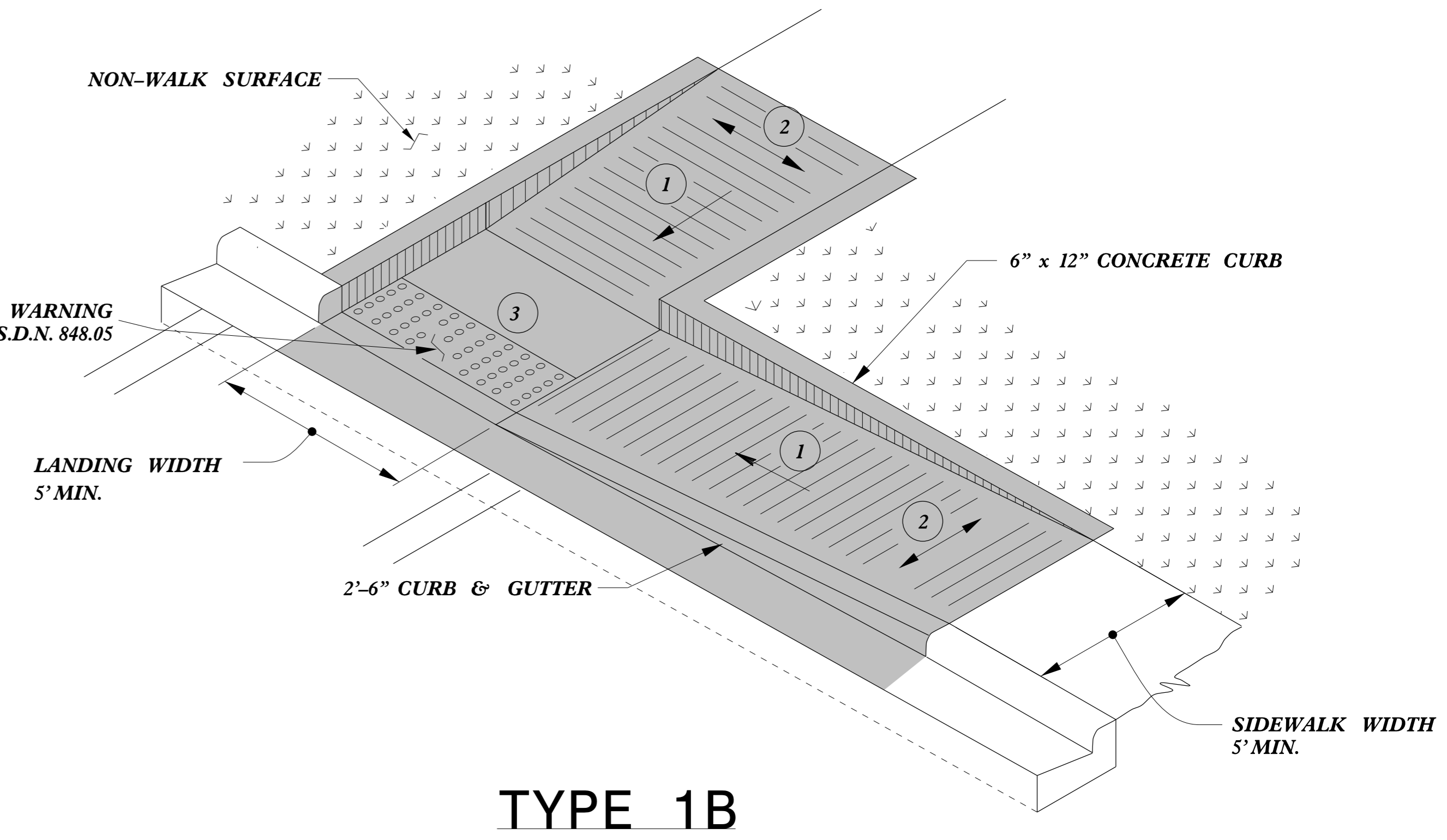
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 \$\$\$DCON\$\$\$\$\$  
 \$\$\$USERNAME\$\$\$\$\$



5/14/99



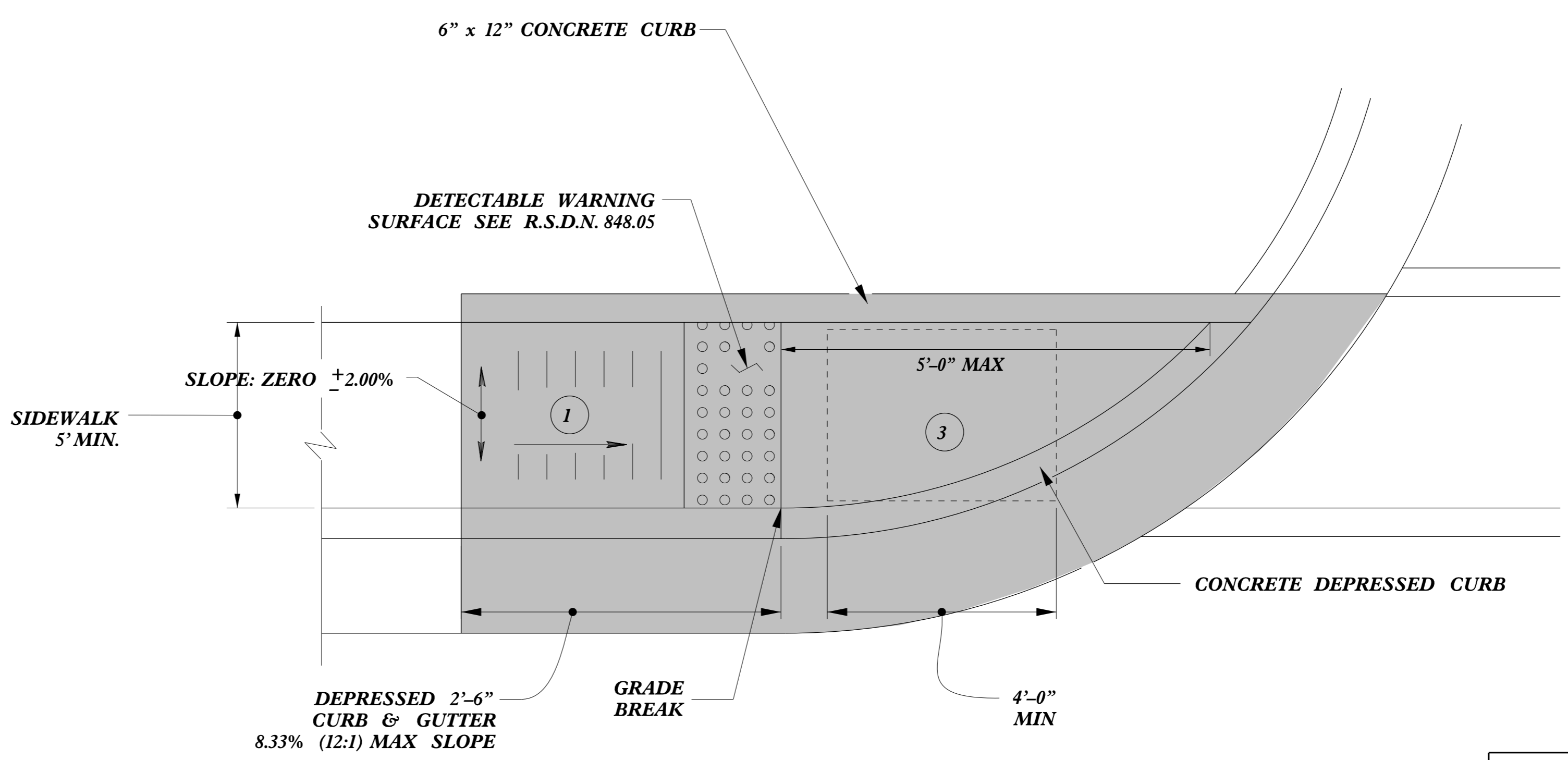
**TYPE 1A**



**TYPE 1B**

**PAY LIMITS FOR 1 CURB RAMP**

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



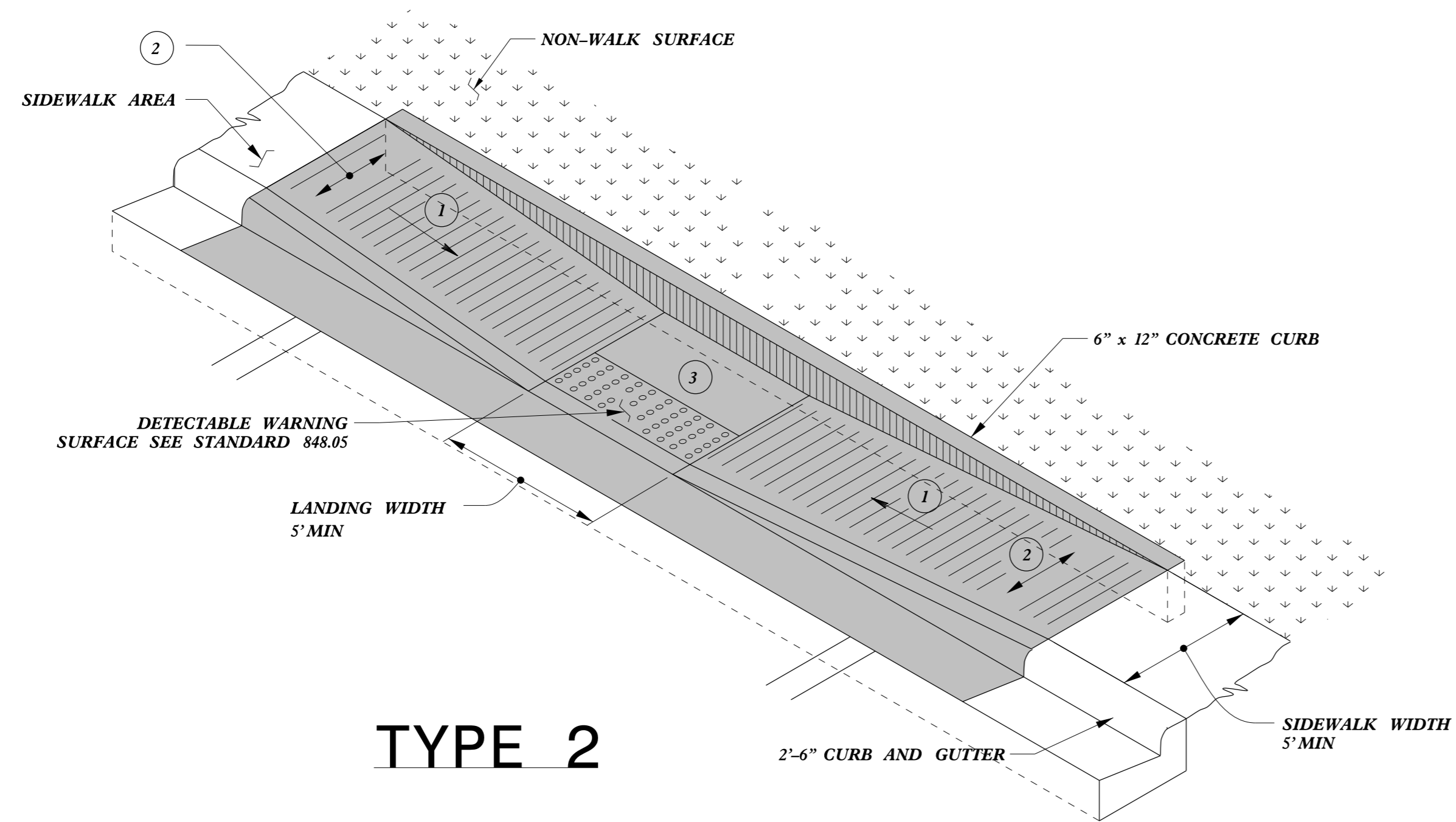
**TYPE 1**



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

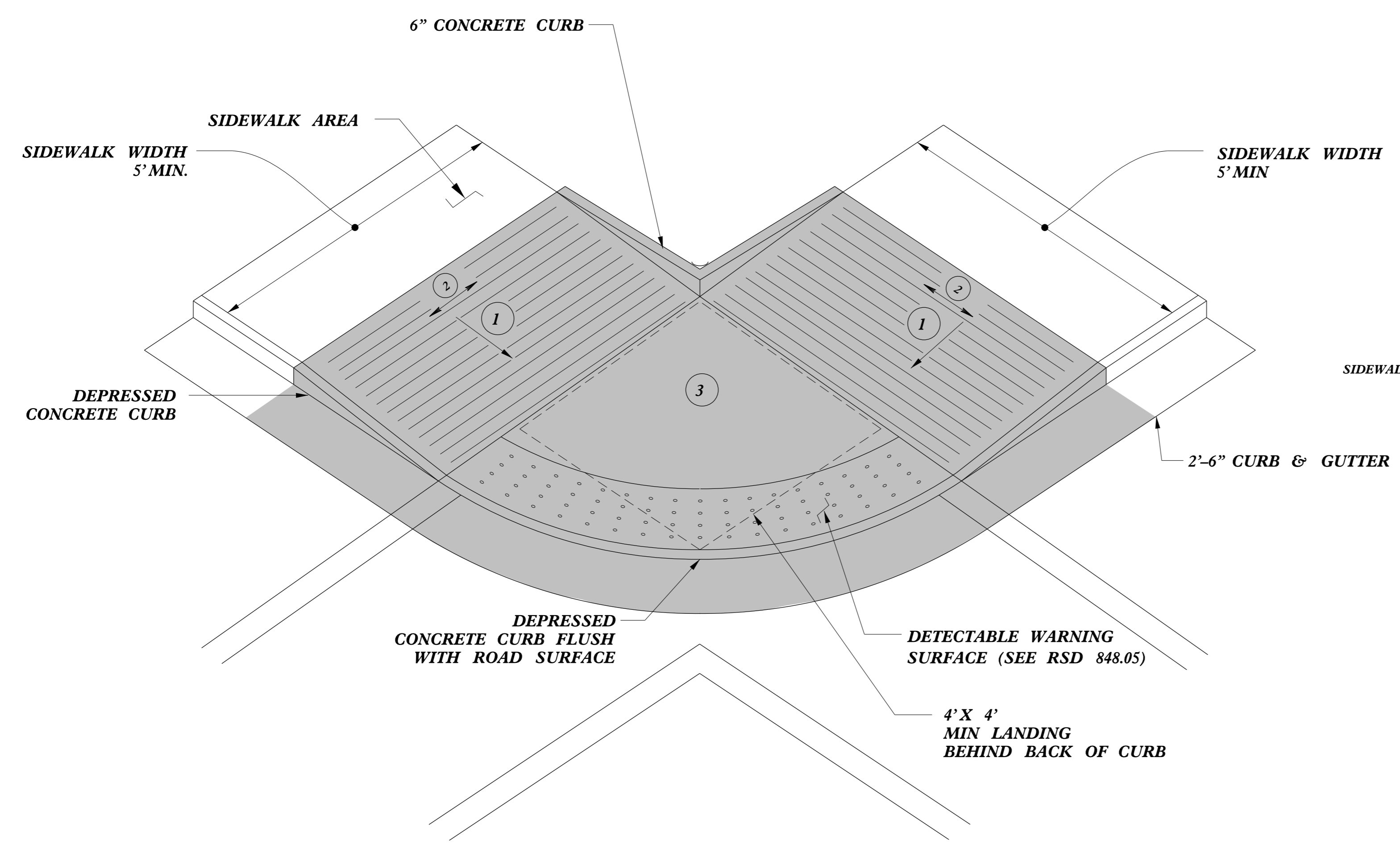
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES



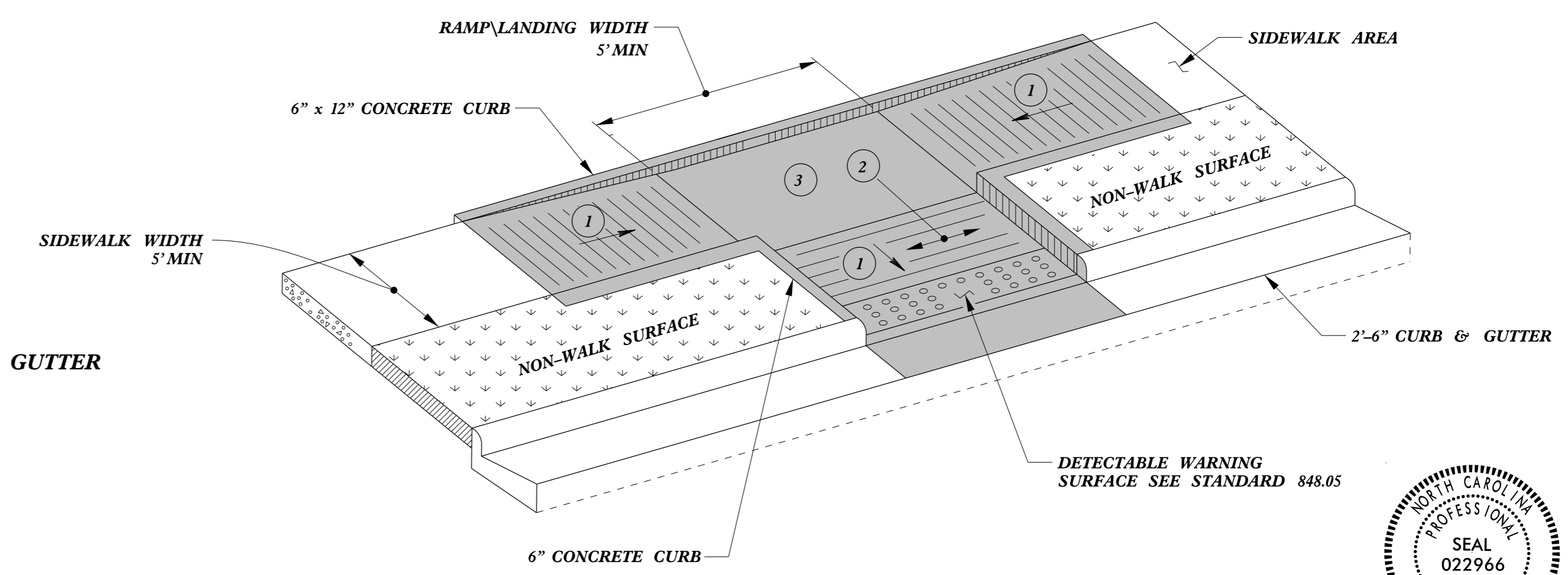
**TYPE 2**

**PAY LIMITS FOR 1 CURB RAMP**

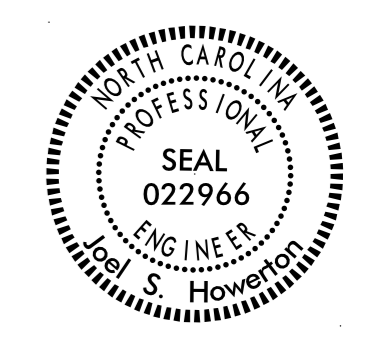
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



**TYPE 2A**



**TYPE 3**

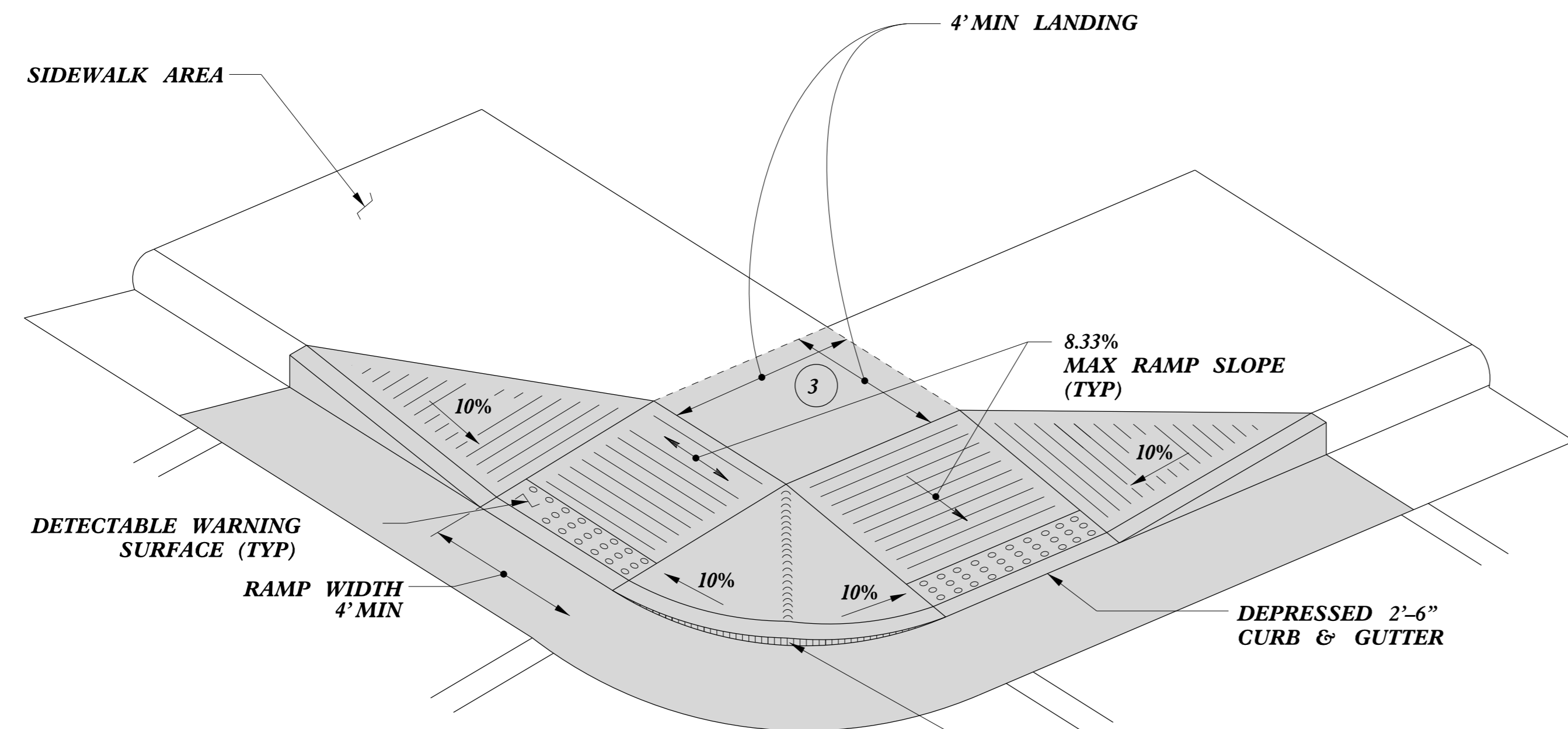


DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

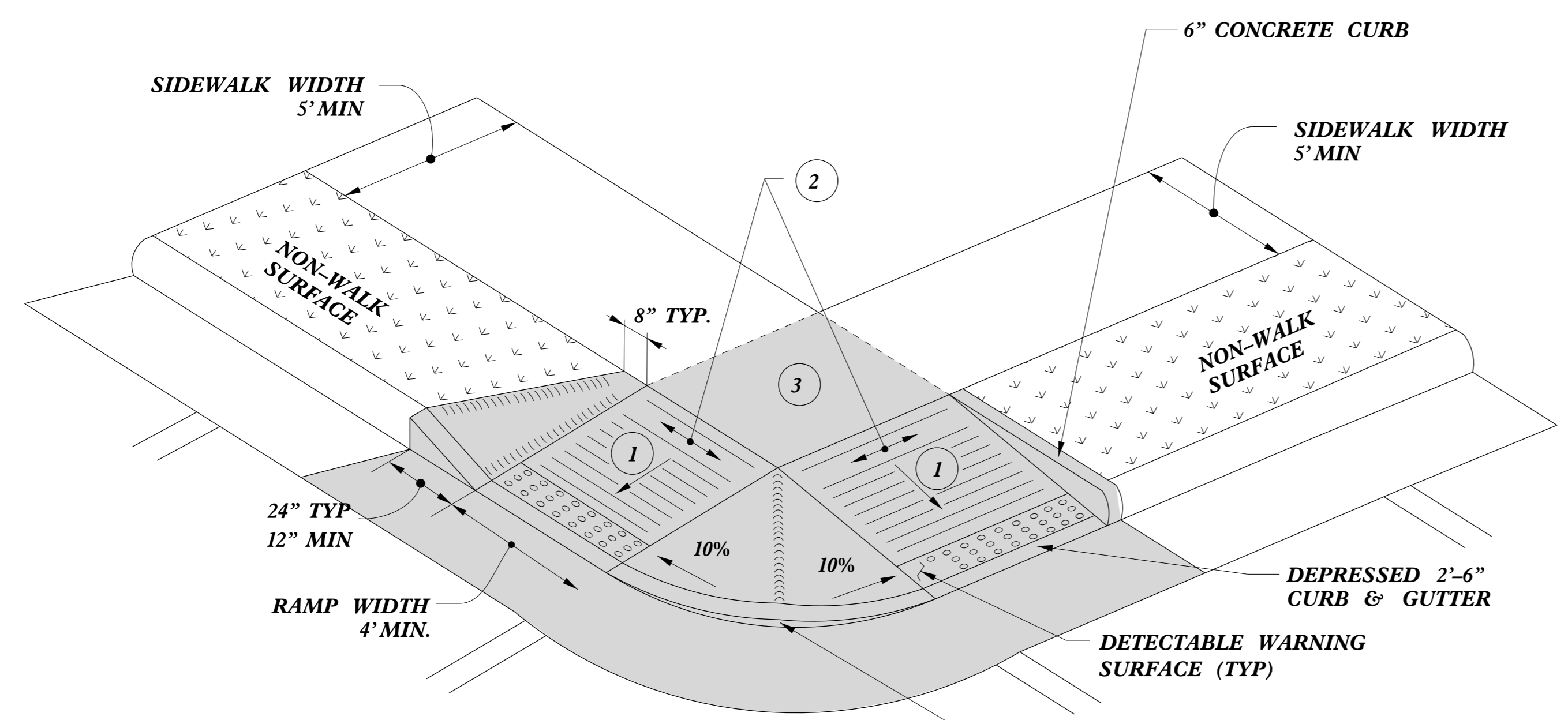
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.: stds/2012CurbRamp/CurbRampDetails.dgn	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

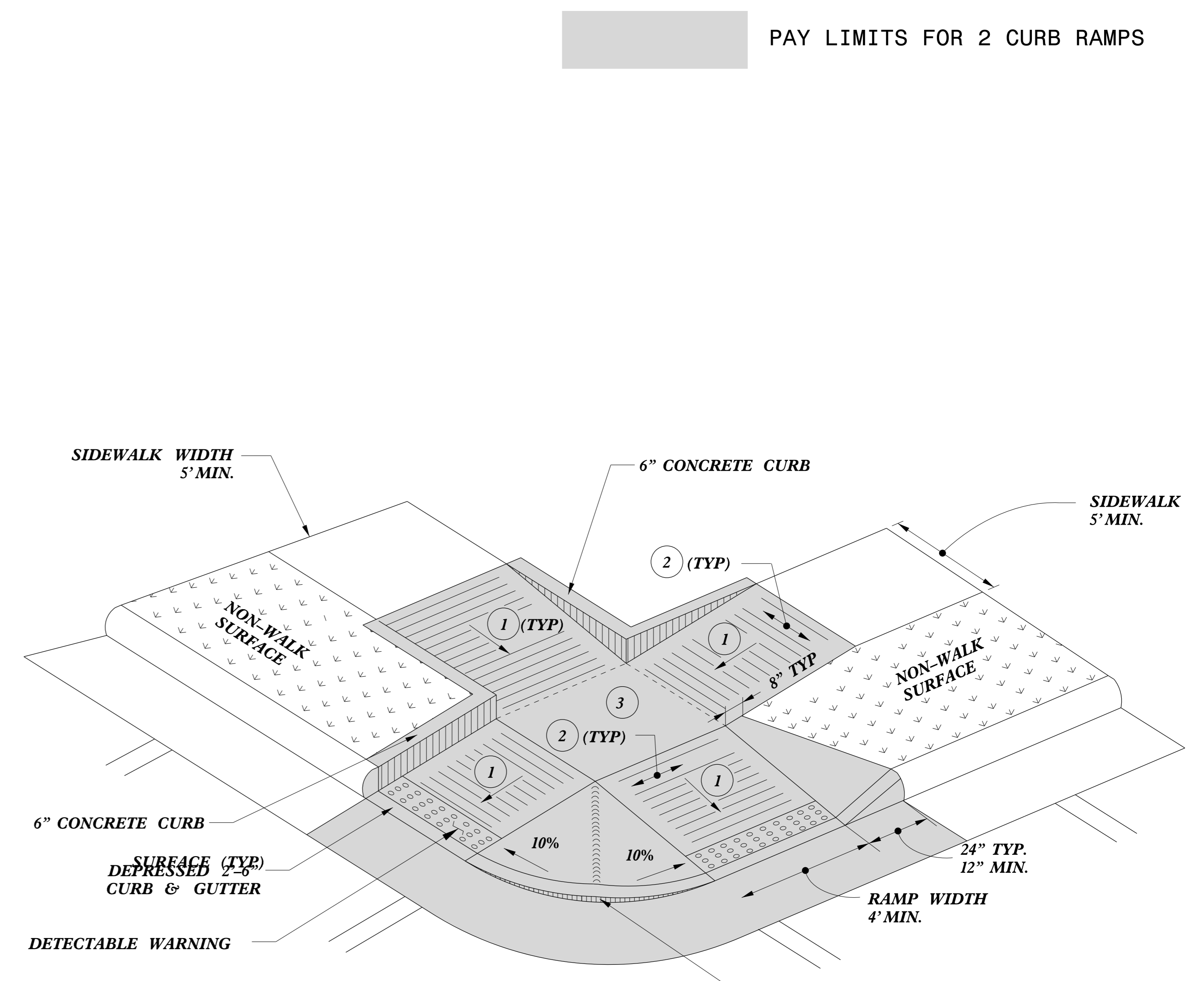
5/14/99  
C:\P\2012\STDS\2012CurbRamp\CurbRampDetails.dgn



**TYPE 4**



**TYPE 4A**



**TYPE 5**

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR 2 CURB RAMPS



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Shared Landing	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99  
C:\TIME\CON\CON\USER\NAME

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.12.07.10361		

**SUMMARY OF QUANTITIES**

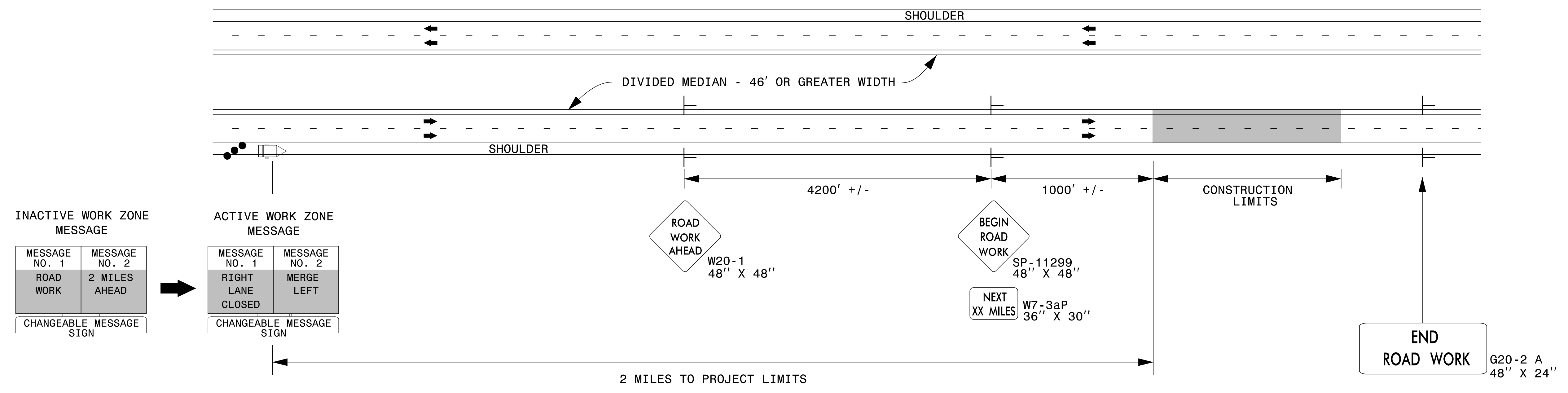
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	0255000000-E	1220000000-E	1245000000-E	1297000000-E	1330000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	2605000000-N	2830000000-N	2845000000-N	5255000000-N	7324000000-N	7444000000-E	7456000000-E		
														AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1 1/2" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	CONCRETE CURB RAMPS	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	PORTABLE LIGHTING	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)		
														MI	FT	TON	TONS	SMI	SY	SY	TONS	TONS	TONS	TONS	EA	EA	EA	LS	EA	LF	LF
2024CPT.12.07.10361	Gaston	1	US-29 / W FRANKLIN BLVD (EASTBOUND LANES ONLY TYPICALS 1 & 2) (EAST & WESTBOUND LANES TYPICALS 3 & 4)	FROM SR-1303 SHADY GROVE RD TO SR-1136 MYRTLE SCH RD	1 2 3 4	2	MD	NO	NO	3.96 0.03 0.03 0.07	VAR. 26-28 VAR. 28-38 VAR. 57-72 VAR. 63-75	2.31	6.4	1,391	123	7.95	4,567	3,136	7,523	376	509	903			2	1	*	2	1,800	700	
<b>TOTAL FOR MAP NO. 1</b>										<b>4.09</b>				<b>1,391</b>	<b>123</b>	<b>7.95</b>	<b>4,567</b>	<b>3,136</b>	<b>7,523</b>	<b>376</b>	<b>509</b>	<b>903</b>			<b>2</b>	<b>1</b>	<b>*</b>	<b>2</b>	<b>1,800</b>	<b>700</b>	
2024CPT.12.07.10361	Gaston	2	US-321 / YORK RD.	FROM SR-1136 /STAGECOACH RD. TO SR-1157 / BEAM ST.	5 6	4	MD	NO	NO	0.65 0.87	VAR. 62-71 VAR. 61-63	3.72	5.24	114		0.65	61,197		5,151	618	407	1,391	2	4	1	*	2	2,150	875		
<b>TOTAL FOR MAP NO. 2</b>										<b>1.52</b>				<b>114</b>		<b>0.65</b>	<b>61,197</b>		<b>5,151</b>	<b>618</b>	<b>407</b>	<b>1,391</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>*</b>	<b>2</b>	<b>2,150</b>	<b>875</b>		
<b>TOTAL FOR PROJ NO. 2024CPT.12.07.10361</b>										<b>5.61</b>				<b>1,505</b>	<b>123</b>	<b>8.60</b>	<b>65,764</b>	<b>3,136</b>	<b>12,674</b>	<b>994</b>	<b>916</b>	<b>2,294</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>*</b>	<b>4</b>	<b>3,950</b>	<b>1,575</b>		
<b>GRAND TOTAL</b>										<b>5.61</b>				<b>1,505</b>	<b>123</b>	<b>8.60</b>	<b>65,764</b>	<b>3,136</b>	<b>12,674</b>	<b>994</b>	<b>916</b>	<b>2,294</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>3,950</b>	<b>1,575</b>		

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.12.07.10361		

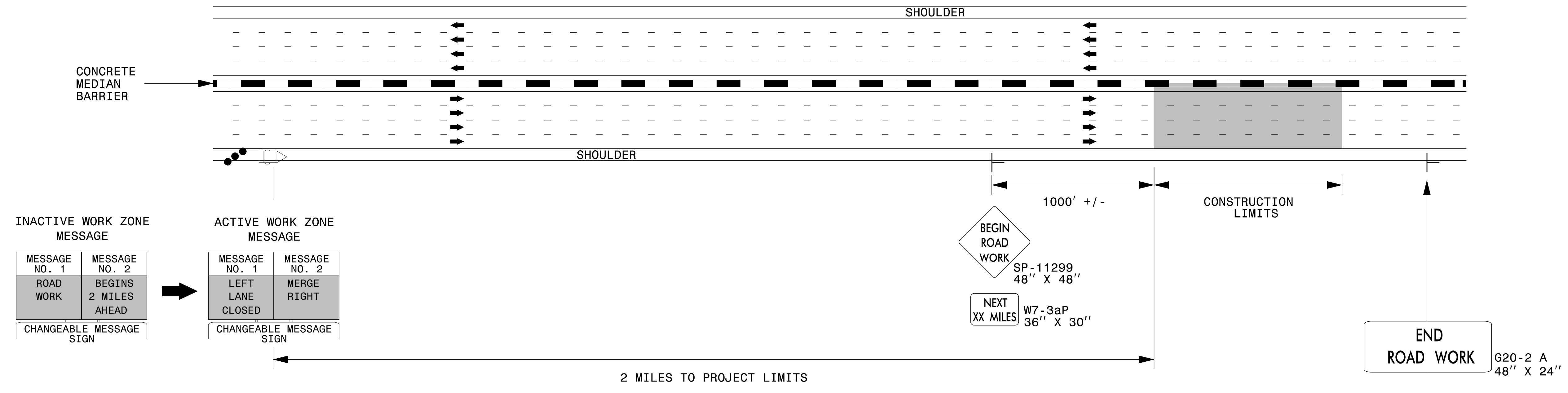
**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4423000000-N	4424000000-N	4434000000-N	4447000000-E	4457000000-N	4510000000-N	4600000000-N	4685000000-E	4695000000-E	4709000000-E	4720000000-E	4725000000-E					4810000000-E	4835000000-E	4840000000-N	4845000000-N	4905100000-N					
												WORK ZONE ADV/GEN WARNING SIGNS	WORK ZONE DIGITAL SPEED LIMIT SIGNS	WORK ZONE PRESENCE LIGHTING	SEQUENTIAL FLASHING WARNING LIGHTS	PEDESTRIAN CHANNELIZING DEVICES	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	SINGLE LANE CLOSURE	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR & LT ARROW 90 M	4" YELLOW PAINT	4" WHITE PAINT	24" WHITE PAINT	PAINT MSG SCHOOL	PAINT LT ARROW	NON-CAST IRON SNOW PLOWABLE MARKERS		
MI	FT	SF	EA	EA	EA	LF	LS	HR	EA	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA						
2024CPT.12.07.10361	Gaston	1	US-29 / W FRANKLIN BLVD (EASTBOUND LANES ONLY TYPICALS 1 & 2) (EAST & WESTBOUND LANES TYPICALS 3 & 4)	FROM SR-1303 SHADY GROVE RD TO SR-1136 MYRTLE SCH RD	1 2 3 4	2	MD	3.96 0.03 0.03 0.07	VAR. 26-28 VAR. 28-38 VAR. 57-72 VAR. 63-75	2.31	6.4	308	4	10	12			110	20	21,120	28,300	1,693		3,027	6	28	5	22	2		1,500	2,500	2,500		2	301		
<b>TOTAL FOR MAP NO. 1</b>								<b>4.09</b>				<b>308</b>	<b>4</b>	<b>10</b>	<b>12</b>			<b>110</b>		<b>21,120</b>	<b>28,300</b>	<b>1,693</b>		<b>3,027</b>	<b>6</b>	<b>28</b>	<b>5</b>	<b>22</b>	<b>2</b>		<b>1,500</b>	<b>2,500</b>	<b>2,500</b>		<b>2</b>	<b>301</b>		
2024CPT.12.07.10361	Gaston	2	US-321 / YORK RD.	FROM SR-1136 / STAGECOACH RD. TO SR-1157 / BEAM ST.	5 6	4	MD	0.65 0.87	VAR. 62-71 VAR. 61-63	3.72	5.24	212				20	1	75		20,065	8,164	130	140	441	12	52	3	6	2	1	20,065	4,714	541	12	20	442		
<b>TOTAL FOR MAP NO. 2</b>								<b>1.52</b>				<b>212</b>				<b>20</b>	<b>1</b>	<b>75</b>		<b>20,065</b>	<b>8,164</b>	<b>130</b>	<b>140</b>	<b>441</b>	<b>12</b>	<b>52</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>20,065</b>	<b>4,714</b>	<b>541</b>	<b>12</b>	<b>20</b>	<b>442</b>		
<b>TOTAL FOR PROJ NO. 2024CPT.12.07.10361</b>								<b>5.61</b>				<b>520</b>	<b>4</b>	<b>10</b>	<b>12</b>	<b>20</b>	<b>1</b>	<b>185</b>	<b>20</b>	<b>41,185</b>	<b>36,464</b>	<b>1,823</b>	<b>140</b>	<b>3,468</b>	<b>18</b>	<b>80</b>	<b>8</b>	<b>28</b>	<b>4</b>	<b>1</b>	<b>21,565</b>	<b>7,214</b>	<b>3,041</b>	<b>12</b>	<b>22</b>	<b>743</b>		
<b>GRAND TOTAL</b>								<b>5.61</b>				<b>520</b>	<b>4</b>	<b>10</b>	<b>12</b>	<b>20</b>	<b>1</b>	<b>185</b>	<b>20</b>	<b>41,185</b>	<b>36,464</b>	<b>1,823</b>	<b>140</b>	<b>3,468</b>	<b>18</b>	<b>80</b>	<b>8</b>	<b>28</b>	<b>4</b>	<b>1</b>	<b>21,565</b>	<b>7,214</b>	<b>3,041</b>	<b>12</b>	<b>22</b>	<b>743</b>		
																					<b>77,649</b>	<b>36,464</b>	<b>1,963</b>		<b>3,468</b>	<b>18</b>	<b>80</b>	<b>8</b>	<b>28</b>	<b>4</b>	<b>1</b>	<b>21,565</b>	<b>7,214</b>	<b>3,041</b>	<b>12</b>	<b>22</b>	<b>743</b>	
																						<b>77,649</b>	<b>36,464</b>	<b>1,963</b>		<b>3,468</b>	<b>18</b>	<b>80</b>	<b>8</b>	<b>28</b>	<b>4</b>	<b>1</b>	<b>21,565</b>	<b>7,214</b>	<b>3,041</b>	<b>12</b>	<b>22</b>	<b>743</b>

## DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



## DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER

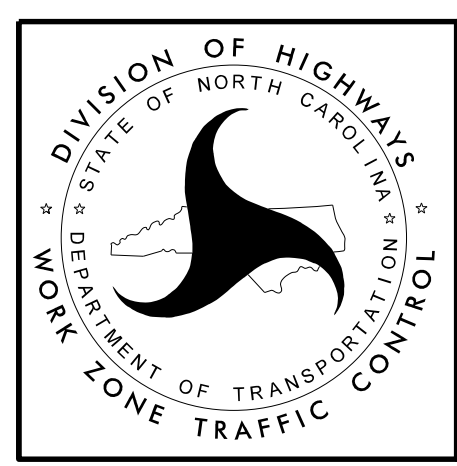


**NOTES:**

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

**LEGEND**

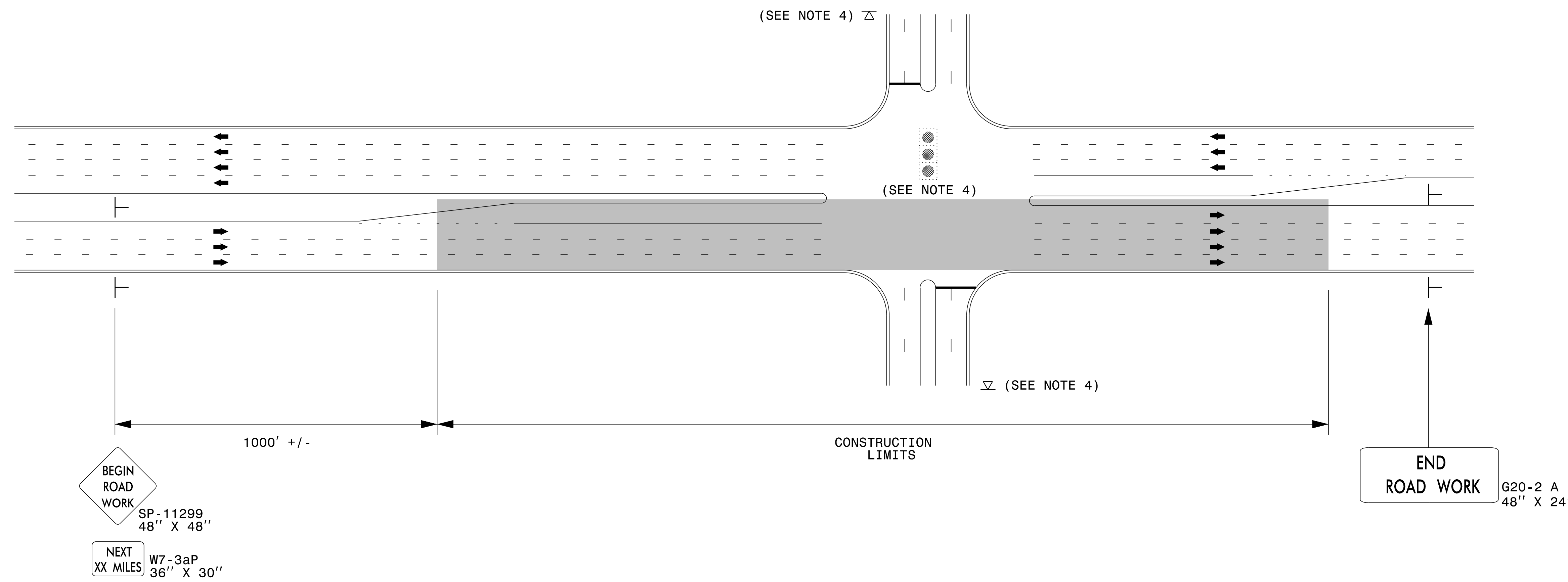
- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE  
WARNING SIGNS FOR  
HIGH SPEED FACILITIES  
≥ 60 MPH**

3/23/2015  
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User:rmgarrrett

## URBAN / SUBURBAN WORKZONES



### NOTES:

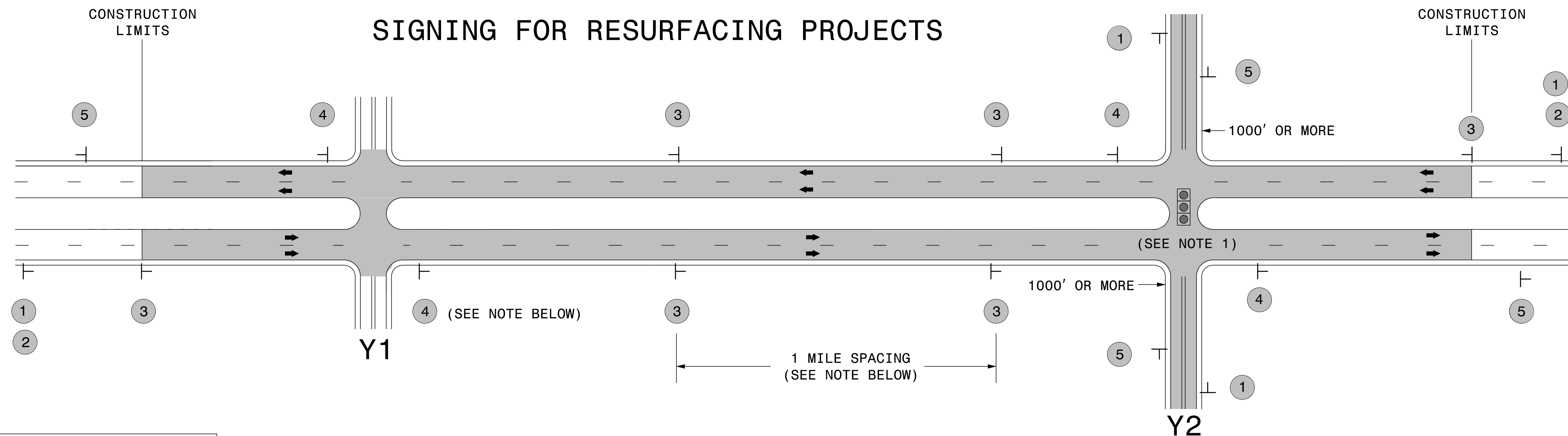
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

### LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



**RESURFACING ADVANCE  
WARNING SIGNS FOR  
URBAN / SUBURBAN  
FACILITIES**



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">             W20-1            48" X 48"         </div> <div style="text-align: center;">             W20-7 A            48" X 48"         </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 W7-3aP 24" X 18"	#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3	 SP 13107 48" X 48"	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4	 SP 13106 48" X 48"	THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.		
			<p>NOTES:</p> <ol style="list-style-type: none"> <li>1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.</li> </ol>	

**RESURFACING  
ADVANCE WARNING SIGNS  
FOR RURAL AND SUBURBAN  
MULTI-LANE ROADWAYS  
W/ SHOULDER SECTIONS**